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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/607,914	Applicant(s) HARJANTO, ANDY	
	Examiner Chelcie Daye	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13, 15-18, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13, 15-18, and 22-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is issued in response to applicant's RCE filed May 29, 2007.
2. Claims 1-4,6-11,13,15-18,and 22-23 are presented. No claims added and claims 5,12,14,and 19-21 remain cancelled.
3. Claims 1-4,6-11,13,15-18,and 22-23 are pending.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 29, 2007 has been entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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In particular, newly amended claim 1 states “enabling access to a web service”, which is not supported within the specification and is deemed as new matter. The examiner is unable to locate/determine adequate support for accessing a web service in order to organize data according to a schema. . In order to further prosecution, the broadest reasonable interpretation will be given to the newly amended claim. Further corrections are needed.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Newly amended claim 1 recites the limitation “the data repository” in the seventh line of the preamble of the claim. Examiner is unsure as to what “data repository” applicant is referring to, since there is no prior mention. As such, there is insufficient antecedent basis for this limitation in the claim.

Also, claim 1 begins by stating “wherein data served from the web service is organized according to at least a schema defining at least one schema class having therein at least one schema attribute”, but later states “where the object is different in format than the corresponding at least one schema class and schema attribute utilized by the data repository”. It is unclear whether the data structure of the schema information is derived from the web service or the data repository. The examiner is unable to tell if there is missing information within the claim to connect the web service

functionality and with the data repository's function, or if the applicant has mistakenly left the data repository in the claim language inadvertently. Further within the claim language, the 2nd and 3rd limitations (i.e., 'receiving from the application' and 'translating, at the interface') continue to discuss the schema class and schema attribute as being utilized by the data repository. However, within the 5th limitation the claim language states that the "syntax and schema understood by the data repository, and which can be serviced directly by the web service", further confuses the possible understanding of the claimed invention. Applicant's specification provides the examiner with an understanding in reference to the data repository with the schema information, not the web service. As such, the claim language as stated is unclear and inconcise. In order to further prosecution, the broadest reasonable interpretation will be given to the newly amended claim. Further corrections are needed.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang (US Patent No. 5,627,979) issued May 6, 1997.**

Regarding Claim 22, Chang discloses a graphical mapping tool for associating a property of a class with an attribute of a schema class of a repository schema, the mapping tool comprising computer-executable instructions which, when executed, enable a method comprising:

presenting a first graphical user interface displaying a plurality of selectable object classes and displaying a plurality of selectable schema classes (Figs.11-15, Chang);

receiving input to the first graphical user interface selecting an object class from the plurality of object classes and selecting a schema from the plurality of schema classes (column 13, lines 21-54, Chang);

in response to the selection of the object class and schema class, presenting a second graphical user interface displaying the properties of the object class and the attributes of the schema class (Fig.17; column 13, lines 55-60, Chang);

receiving input to the second user interface selecting a property from the properties of the object class and selecting an attribute from the attributes of the schema class (columns 13-14, lines 60-67 and 1-11, respectively, Chang);

in response to the input received to the second user interface, mapping the selected property to the selected attribute (column 14, lines 16-29, Chang);
and

in response to the mapping, inserting metadata within a definition of the selected object class, the metadata associating the selected object property with the selected schema attribute (column 14, lines 30-53, Chang).

Regarding Claim 23, Chang discloses a mapping tool wherein the second graphical user interface is only presented after first receiving user input selecting said at least one selectable object class and said at least one selectable schema class from the graphical user interface (column 13, lines 55-66, Chang).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 1-4,6,9-11,13,and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parvathaneny (US Patent No. 5,829,006) filed July 21, 1997, in view of Van Huben (US Patent No. 6,484,177) filed January 13, 2000.**

Regarding Claim 1, Parvathaneny discloses a method for enabling access to a web service, wherein data served from the web service is organized according to at least a schema defining at least one schema class having therein at least one schema attribute, from an application, the application having an object of an object class having an object property, where the object is different in format than the corresponding at least one schema class and schema attribute utilized by the data repository but where the object is intended to receive data from the web service that is translated from the schema class, the method comprising:

providing the application with an interface interposed between the application and the web service, where the application and the interface are configured to execute in a runtime environment platform (column 3, lines 57-67 and column 5, lines 52-58, Parvathaneny)¹;

receiving from the application, at the interface, an access command, wherein the access command identifies an object class and an object property of the object class in a format specific to the application (column 3, lines 36-44 and lines 57-64, Parvathaneny) but which format is different than a format utilized by the repository to define a corresponding schema class and schema attribute (column 5, lines 21-31, Parvathaneny);

translating, at the interface, the access command to a reformatted access command using the syntax and schema of the data repository, wherein the translated access command identifies the schema class and the schema attribute of the data repository which corresponds to the object class and the object property within the application (column 5, lines 21-42 and column 9, lines 46-52, Parvathaneny)², wherein translating the access command to a reformatted access command comprises:

reading metadata contained within the object class that identifies the object class and property of the object class that links the object class and object property of the object class to the corresponding schema class and schema attribute within the data repository (column 8, lines 3-56, Parvathaneny).

¹ Examiner Notes: The gateway corresponds to the interface.

However, Parvathaneny is silent with respect to using the metadata that identifies the object class to reformat the access command into a command using the proper syntax and schema understood by the data repository and which can be serviced directly by the web service, and sending the access command to the web service. On the other hand, Van Huben discloses using the metadata that identifies the object class to reformat the access command into a command using the proper syntax and schema understood by the data repository and which can be serviced directly by the web service, and sending the access command to the web service (column 17, lines 10-55 and column 18, lines 7-34, Van Huben). Parvathaneny and Van Huben are analogous art because they are from the same field of endeavor of data management. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Van Huben's teachings into the Parvathaneny system. A skilled artisan would have been motivated to combine as suggested by Van Huben at column 1, lines 48-54, in order to provide uniform means for managing any type of data across a large global enterprise. The system allows the means to be applied to data residing in a directory service, a simple file system, or a traditional database, resulting in fewer complications. Therefore, the combination of Parvathaneny in view of Van Huben, disclose

receiving at the interface from the web service a response to the access command, where the response contains an instance of the schema class

² Examiner Notes: The gateway includes the query generator and the translator (i.e. object generator) (column 4, lines 13-15, Parvathaneny), which therefore discloses the limitation of "translating, at the interface".

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formatted according to the schema (column 14, lines 11-59 and column 17, lines 56-66, Van Huben); and

populating the object class by the interface translating the schema class (columns 15-16, lines 66-67 and 1-16, respectively, Van Huben).

Regarding Claim 2, the combination of Parvathaneny in view of Van Huben, disclose a method wherein translating the access command to a translated access command further comprises:

modifying the access command by removing a reference to the object property of the object class and by adding to the access command a reference to the schema attribute (column 11, lines 21-36, Van Huben).

Regarding Claim 3, the combination of Parvathaneny in view of Van Huben, disclose a method wherein the step of translating the access command to a translated access command further comprises altering a format of the command to a different format that the repository is capable of processing to grant access to the repository (column 13, lines 5-23, Van Huben).

Regarding Claims 4,13, and 17, the combination of Parvathaneny in view of Van Huben, disclose a method wherein the step of translating the access command to a translated access command further comprises employing an application programming interface to process an intermediate command derived from the access command (column 6, lines 28-36, Van Huben).

Regarding Claims 6 and 18, the combination of Parvathaneny in view of Van Huben, disclose a method wherein the repository is an LDAP-compliant directory service (Fig.1, item 15, Van Huben), and wherein the schema is in accordance with the LDAP protocol (column 14, lines 7-11, Van Huben).

Regarding Claim 9, the combination of Parvathaneny in view of Van Huben, disclose the method further comprising:

receiving a response from the repository pursuant to transmitting the translated access command to the repository, wherein the received response identifies the schema class and schema attribute (column 9, lines 46-61, Parvathaneny);

translating the received response to a translated response, wherein the translated response identifies the object class and object property in a format specific to the application and that is different than a format utilized by the repository to define the corresponding schema class and schema attribute (column 5, lines 21-42 and column 9, lines 46-52, Parvathaneny); and

fulfilling the access command received from the application by transmitting the translated response to the application (column 5, lines 21-31, Parvathaneny).

Regarding Claims 10,11, and 16, the combination of Parvathaneny in view of Van Huben, disclose a computer-readable medium having stored thereon computer-executable instructions (column 5, lines 43-66, Parvathaneny).

Regarding Claim 15, the combination of Parvathaneny in view of Van Huben, disclose a method wherein the access command is selected from the group consisting of a read command, a write command, and a search command (column 6, lines 22-34, Van Huben).

13. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parvathaneny (US Patent No. 5,829,006) filed July 21, 1997, in view of Van Huben (US Patent No. 6,484,177) filed January 13, 2000, and further in view of Ferguson (US Patent No. 6,016,499) filed July 21, 1997.

Regarding Claim 7, the combination of Parvathaneny in view of Van Huben, disclose all of the claimed subject matter as stated above. However, the combination of Parvathaneny in view of Van Huben, are silent with respect to the repository being an LDAP-non-compliant³ repository, and wherein the schema, including the schema class and the schema attribute are implicit within the non-compliant repository. On the other hand, Ferguson discloses the repository being an LDAP-non-compliant⁴ repository (column 8, lines 44-48, Ferguson), and wherein the schema, including the schema class and the schema attribute are implicit within the non-compliant repository (column 7, lines 15-17, Ferguson). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Ferguson's teachings into the Parvathaneny in view of Van Huben system. A skilled artisan would have been motivated to combine as suggested by Ferguson at column 4, lines 59-67, in order to provide a system for making information in a directory service repository accessible to tools that were designed and written to access relational databases and also to provide a system

³ Examiner interprets non-compliant to mean "not", therefore by the database being ODBC-compliant it is not an LDAP rendering it non-compliant.

which make repository information accessible to tools that use SQL or conform with ODBC. As a result, allowing the system to obtain a multitude of information throughout a broad spectrum of interface standards.

Regarding Claim 8 the combination of Parvathaneny in view of Van Huben, and further in view of Ferguson, disclose a method comprising extracting the implicit schema and recording it as an express schema (column 7, lines 15-17, Ferguson).

Other Prior Art Made of Record

Srinivasan et al. (US Patent No. 5,687,856) discloses a method and system for storing directory information objects in a relational database management system. In addition, a method and system for generating a statement in a database query language to search or manipulate objects or entries that are stored in a relational database is disclosed. An aspect of the invention is directed to a method and system that can automatically generate a SQL statement for an LDAP search filter

Response to Arguments

Applicant's arguments with respect to the newly amended claim, has been considered but are moot in view of the new ground(s) of rejection.

⁴ Examiner interprets non-compliant to mean "not", therefore by the database being ODBC-compliant it is not an LDAP rendering it non-compliant.

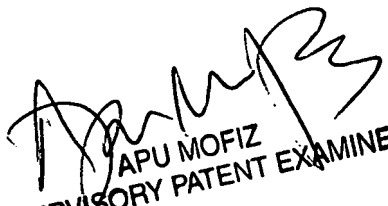
Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
Patent Examiner
Technology Center 2100
July 30, 2007


APU MOFIZ
SUPERVISORY PATENT EXAMINER